JOHNNY RICH

FAIRER FUNDING

The case for a graduate levy

Full proposal paper

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1. Introduction

The English tuition fee system is designed to be progressive and to ensure that higher education is well funded. As the Government considers how it could be improved, many former detractors are recognising we could do far worse and fear change.

However, at the heart of the system, there is a problem. It breaks the first rule of marketing: think like your customer. As the head of Push, an outreach organisation that visits hundreds of schools a year, my team and I meet those potential customers regularly. They – especially those from disadvantaged backgrounds – see the system as a barricade.

The system is complicated when students need simplicity. It deals in average outcomes when almost no prospective student is average. It expects people, many of whom are not yet officially adults, to think of their hopes and dreams as investment plans and their life-changing decisions as risk assessments.

Worst of all, it claims the large debts are okay, because they are an illusion anyway – not 'real' debt. When your sales pitch involves admitting misrepresentation, then no one should be surprised that, for all its attempts to be progressive and affordable, the system is less than popular.

Consider how the English fees and loans deal looks to a prospective student, perhaps someone from a disadvantaged background but one who – despite the complexity – understands the system and is even keen to make a rational choice.

They are being invited to make an investment, an investment for which they will need to borrow over £45,000 and, broadly speaking, take themselves out of immediate earnings and career progression for at least three years. For this, they will receive no material collateral whatsoever, but rather the promise that, on average, they are likely to earn more – although, on average, not enough to pay off anything like the entirety of the debt.[1]

They will reflect on the fact that their debts on graduation will be higher than for students from more affluent backgrounds, given the abolition of maintenance grants. Meawhile, their prospects of getting a graduate-level job and of achieving the promise of a higher-than-average salary will be lower.[2] They will be less likely to engage in the extracurricular advantages of the student experience, not least because they are more likely to be studying part-time, living at home or doing part-time work.[3]

When you look at it like this, for all the current system's intended progressiveness, it is almost a wonder that anyone from a disadvantaged background sees it as a fair investment. The fact that so many do is because choices are not rational cost-benefit analyses. They are emotive impulses based on the desire for agency in our lives, often against the odds.

Similarly, the current funding regime fails to meet the needs of employers, leaving large skills gaps. It also fails to meet the needs of taxpayers or society.[4]

We need a solution that can appeal to all sides of the political spectrum: a socially equitable solution to deliver economic and public good, where the market does the heavy lifting, which strengthens labour supply and the higher education sector, while creating opportunity and eliminating (or minimising) student debt.

This could be achieved through a 'graduate levy', a charge comparable to graduates' student loan repayments but paid by employers for each graduate they employ and based on the salary that the graduate receives. These graduate levy revenues should be paid to the higher education institution where the graduate studied, giving the institution an incentive to ensure their graduates' employability.

To boost social mobility, each university should have targets for recruiting students of diverse kinds and from different backgrounds. Those institutions that did not meet those targets would contribute to a national access fund to support those institutions with a better record of meeting targets.

Various challenges can be directed at this graduate levy approach. This paper seeks to dispel these challenges, to show that they are in fact less problematic than under other systems of HE funding, or to demonstrate that they can be resolved in the detail design of the levy or with tweaks to the approach. Ultimately, the graduate levy is more likely to succeed than the current model because it aligns the interests of all the stakeholders in ensuring a stable and sustainable system of higher education. In other words, if one stakeholder wins, they all win; if one loses, everyone loses.

The transition from the current system of student loans to the graduate levy system could be achieved by switching from lending by the taxpayer to students to lending to higher education institutions and phasing out costs to the Treasury over time.

2. Towards a sustainable solution

Since tuition fees were (re)introduced in 1998, the number of higher education students in the UK has trebled from 650,000 to 1,900,000.[5] At the same time, we have seen the introduction of student loans, top-up loans, fees, top-up fees, the Browne Review followed by trebled fees and, most recently, a hike in the repayment coupled with the announcement of another review.

In the context of a massive expansion in student numbers, stability was always going to be difficult to achieve, and possibly not even desirable. But the shift within a generation from free education to the normalisation of graduate debts of over £50,000 has inevitably run short on public support.

Yet, it is the same expansion that has been used to justify such a shift. The cost to the taxpayer, it was argued, could not reasonably be expected to make as generous an offer to 50% of school-leavers entering higher education as they did to the 18% that progressed to higher education thirty years previously.

However, in order to protect standards, the higher education providers have successfully resisted per capita funding cuts. And so, while students bear a huge burden of debt, the cost to the taxpayer has risen[6], some universities are struggling financially and employers continue to complain that graduates are not job-ready, and the national economy is facing severe skill shortages.

The four key stakeholders of higher education – students, taxpayers, institutions and employers – are like four horses hitched to the corners of the same cart, all pulling in competing directions (lower tuition fees, lower public costs, higher funding, better labour market supply). It could be argued that this is an ideal way to achieve a balance, but that supposes the horses are equally strong. Time and again, the students' pony has lost out and graduates have borne ever more of the costs. The current Augar Review of post-18 education is political acknowledgement that the cart is off kilter.

Even if the cart were ever in equilibrium, it was fragile, incapable of forward motion without destroying the cart. Changes – such as growth in student numbers, shifting skills needs, or new economic challenges – were always bound to unsettle it.

The issue of student finance will never attract consensus support unless the horses are hitched to the front of the cart. We need a funding system that aligns stakeholders' interests rather than setting them against one another. Only then can we achieve an approach that is both politically resilient and responsive to change in the wider labour market.

This means a system that minimises student debt, requires the taxpayer to pay only for the public benefits of higher education, ensures sustainable funding for universities, and maximises the employability of graduates. We may be closer than we think.

3. The solution

This paper proposes a solution comprising three interdependent policy changes. The total funding of the system is intended to remain unchanged on the basis that, if the current system is deemed affordable in terms of public investment and provides sufficient funding to higher education, then so too should these proposals.

3.1. Step 1: Eliminating student debt

Instead of tuition fee loans, we should introduce a graduate levy – broadly equivalent to current loan repayments – charged to employers for each graduate they employ.

Debt repayment is normally based on what a debtor owes, not on what they earn. That is why Government-funded student loans have often been described as a graduate tax in all but name.[7]

From the graduate's perspective, student loan repayments do indeed operate as a tax paid alongside and in the same way as employee National Insurance contributions (NICs). Students do not, however, regard the burden of that debt as 'merely' a tax either when they are graduates nor, in particular, when considering whether to go to university in the first place. Despite higher rates of participation among full-time undergraduates, there is evidence that debt aversion dissuades some potential students – particularly those from disadvantaged backgrounds – from progressing to higher education because they are understandably averse to accruing the debts involved, regardless of the affordability or purported progressiveness of the repayment mechanism.[8]

This effective denial of higher education to the most disadvantaged is not only a betrayal of fairness, but also a rejection of the economic gains of greater social mobility. It also means that public investment in higher education effectively subsidises the most affluent disproportionately.

A 'graduate levy' means the graduate no longer pays. Rather than the current repayments being collected alongside the employee's National Insurance Contributions, the levy would be paid alongside the employer's contributions.

Depending on how the employer chooses to absorb the levy, their costs may be no more than the current funding arrangements. Consider a graduate on a salary of £26,000: under current arrangements, their loan repayments amount to £90 over the year (9% of earnings over £25,000) and, before other deductions, their salary is £25,910.

Under the graduate levy, the employer can choose to offer the same job at a salary of £25,910.[9] Assuming they still employ a graduate, their outgoings will be the same £26,000 as previously because they are paying the graduate levy on top of the salary. It has cost the employer not a penny more and the graduate takes home not a penny less, but the graduate has no tuition fee debt.

Of course, the employer could choose to employ a non-graduate and save £90. That is no different from now: employers often do employ non-graduates at lower rates, but the graduate earnings premium, for which evidence remains clear, demonstrates that employers do consider it worth paying more.

There are those who argue that there are too many graduates. I disagree.[10] Either way, the graduate levy would certainly test the argument. I suspect employers would continue to regard graduates as worth a small extra amount even when confronted more transparently with the extra cost of employing them – a cost they have been paying all along anyway.[11]

3.2. Step 2: A well-served labour market

The graduate levy is neither a loan repayment nor a graduate tax, because it would not be paid into Treasury funds. Instead it would be channelled directly back to the institution where the graduate studied.

This means that, by providing an effective higher education, each university invests in the future employability of its graduates.

Employers' complaints about the 'job-readiness' of graduates may be divided into two separate issues.

3.2.1. Skills shortages

The current fee regime puts students 'at the heart of the system': funding follows student choice, but this is not a cold, rational and expert process focused solely on future earnings and well-informed judgements about future gaps in the labour market. Students' choices have become the key determinant of graduate labour market supply. This relies on the hope that labour demand will match supply because students will make decisions, informed by an appreciation of long-term labour market trends, to prefer courses in skills shortage areas instead of over-competitive careers.

Some areas, such as Biology or English, attract applicants because they follow naturally from school subjects. Others, such as Medicine, are related to careers that most children encounter personally as they grow up. Perhaps it is unsurprising then that areas such as Engineering (which is neither directly taught in school nor a universally familiar career) end up with huge shortages[12] (despite being critical to the economy and well paid). Meanwhile, subjects seemingly linked to careers that have been popularised by television, say, produce far more graduates than the number of vacancies in those areas.

From the perspective of the individual, the fact that too many other people are chasing the same dream does not make that dream less attractive. Moreover, the high cost of tuition does little to nudge people towards better-evidenced course choices. They are just as likely to think, if it is going to cost so much, I'm not compromising my ambitions (especially since they will not repay if it goes wrong).

To chase the student demand, universities lay on more of the popular courses (regardless of labour market need), perpetuating the impression to students that there is an open career path. Forensic science is a good example. There are currently 8,500 undergraduates studying Forensic Science in the UK. Each year there are approximately 50 openings for graduates and many of those vacancies will be filled by graduates in Chemistry, Biochemistry and other conceptually broader subjects. That does not mean the rest will be unemployed nor that they have studied a useless degree, but it does mean that the availability of such Forensic Science courses (often with lower entry requirements than Chemistry or Biochemistry) creates an impression among prospective students that they will be able to enter a profession – an impression that is false for all but a handful of the most exceptional, lucky or otherwise advantaged graduates.

On graduation, they find themselves qualified in a subject that sends the wrong message to employers about their enthusiasm for alternative careers and maybe equips them less well than a broader subject might have done (which, as it happens, would also not have closed their options to a career in forensics). Even more than those with a broader subject qualification, they will need to be able to evince well-rounded employability skills (see below).

It would be better for students and the labour market if universities, with greater access to expertise than individual students, had an incentive to limit their intake of Forensic Science students to a number closer to the future demand. It would be better for ensuring a well-matched graduate workforce too.

Excessive student demand to study a subject might drive up entry requirements, meaning that those entering the subject would indeed be likely to get jobs in their chosen field. Meanwhile, other students would turn to exploring broader subjects or undersubscribed disciplines where universities are seeking to expand graduate output because they can see future secure revenue from the long-term employability of graduates in those areas.

The graduate levy incentivises institutions to match the supply of their graduates better in terms of subjects studied to future labour market needs. It even incentivises institutions to undertake recruitment marketing not just for their institution, but also for individual, economically important subject areas.

3.2.2. Employability skills

Other than careers where specific qualifications are necessary, most employers do not recruit on the basis of the subject a graduate has studied.[13] Other than specialised roles, most are looking for a rounded set of attributes that together comprise employability: knowledge; hard and soft skills; character attributes (such as personality, attitude and behaviours); and social capital.[14]

Apart from a few specific subject areas (such as Medicine), if a university wishes to ensure its future financial prosperity under a graduate levy system, it will focus on ensuring that its students perform well and develop fluid employability that will make them attractive in the labour market in the long-term. One of the best ways to achieve this is to ensure they enjoy and engage with their learning. That means having the opportunity to study a well-taught course of their choice, and so universities have an incentive to balance what students want to study with what will deliver an income return.

In a 2015 paper for HEPI, I wrote about how universities could do more to develop employability of this sort among graduates.[15] Many institutions have taken significant strides in the directions I proposed and the Government has attempted to create incentives to support employability, in ways that I would not wholly support, through the graduate outcomes metrics of the TEF.

Even so, penetration of the mindset has only gone so far. In many cases, the courses that have embraced, for example, work-related learning most readily were the same courses that were already most closely vocational or work-related. I would be pleased to see wider evidence of traditional academic subjects, particularly in the arts and humanities, finding ways to make their learning more applied and developing metacognitive approaches to transferable skills such as communication, numeracy and enterprise.

The graduate levy would encourage universities to ensure that no graduate leaves without a good understanding of what it takes to contribute and generate value in the world.

In no way is this a model of universities as production lines for the workforce. It is entirely consistent with the acquisition of knowledge for its own sake and universities as hallowed seats of learning. Long-term employability means becoming a rounded person. Rounded people make more attractive employees, more able entrepreneurs, more inquisitive researchers, and more effective disseminators of knowledge.

The economic value is just a small part of what a well-rounded graduate has to offer and that value is transferable whether in business, as an academic, or through starting their own enterprises too.

3.3. Step 3: A fair and diverse HE system

Each university should have targets for its student intake and retention. Those who miss their targets would contribute to a Fair Access Fund. Those who outperform would receive subsidies from the Fund.

Steps 1 and 2 minimise student debt and align universities' interests with employment outcomes that benefit graduates, employers and the wider economy. However, a key component of employability is social capital and so these two steps alone would create a perverse incentive to embed advantage: to recruit students from affluent backgrounds over poorer ones, men over women, young students over mature, white student over black and minority ethnic students, and able-bodied students over those with disabilities.

Under current access arrangements, universities, such as Oxford and Cambridge, spend proportionately far more on access measures than universities (such as Queen Mary University London, to take another example from the Russell Group) with a far better track record of admitting non-traditional students.[16]

The very universities that spend the most are, when it comes to yielding results, the least effective at spending it, because for them the task is hardest.[17] Meanwhile the institutions that achieve wider access with minimal expense need further support. This is an absurd state of affairs. This proposal would redistribute large amounts of funding according to where it is best invested to ensure a fair and sustainable higher education system.

It would also support institutional autonomy and encourage diversity among higher education institutions as different institutions adopt different strategies. Some may opt for the security of short-term funding from the Fair Access Fund because they have strengths in wider participation. Others could decide to become more socially elitist, accepting they will be large net contributors to the Fund, in the hope that the social advantage of their graduates would remain sufficiently robust to ensure a long-term financial gain. However, the latter would be a high-risk financial approach, not least because it would narrow the intellectual pool of their student intake. It is more likely they would try to achieve a balance (not least because they would rather spend their money on their own efforts rather then subsidise other universities').

Whatever approach they adopt, diversity is good for innovation and for institutional competition that is based not on shallow benefits and heuristics, but on how well they deliver the diverse needs of diverse stakeholders.

3.3.1. An alternative Step 3

An alternative way of ensuring that higher education institutions do not use student selection to unfairly 'game' their future revenues would be to do away with student selection. Professor Tim Blackman has written compellingly on the idea of a 'comprehensive' system of higher education whereby students would be accepted on the basis of matriculation alone.[18] The Fair Access Fund I have proposed would be a less radical solution, with (for better or worse) less far-reaching consequences.

4. Challenges and objections

There are ifs and buts that can be hurled at any proposal and I have attempted to field some of them below, but it is important not to throw out a system that is stable and sustainable because there are details that need to be tweaked.

The graduate levy would be stable and sustainable for the very reasons I outlined earlier: unlike the current system or a graduate tax or most other options for higher education funding, this aligns the interests of all stakeholders. Rather than a situation where for one stakeholder to win, another must lose, we must rewrite the rules of the game to ensure that is anyone wins, everyone wins, and if anyone loses, everyone loses.

This means that, when an unintended consequence does arise, the necessary adjustments do not bring the edifice tumbling, but rather they come from the mutual interests of all stakeholders and recalibrating accordingly.

4.1. 'This is a tax on business and employment'

The strongest and most likely objection is likely to be from the business community, which may perceive a graduate levy as an unwarranted tax increase. In fact, as explained above, there is no reason the graduate levy should cost a penny more in an employer's wage bill than the current system. It is simply a case of no longer pretending that the money goes to the graduate before it repays what is currently classed as a loan. Instead goes straight from the employer.

The graduate levy system assumes that employers will compensate by making adjustments in the gross salary they offer to graduates to ensure the net remains the same. If they choose not to do so, it can only be because they are afraid they will lose the competitive advantage of attracting the best graduates – in other words, they value graduate talent sufficiently highly to be willing to pay more for it. This would imply a correction in the graduate demand and supply market rather than an exploitation or manipulation of it.

Of course, it is not easy to reduce the salaries of existing workers, which raises a question about the process of transition between the current loans system and the graduate levy: should existing loans be converted to levies? I have addressed this in further detail below, but it only creates a potential cost for employers if they are retrospectively converted. That is unlikely to be the case, but if it were and the government felt it was necessary to recompense employers, it could do so through the tax system (retrieving what would be a relatively modest cost through a small increase in the higher rate of income tax, many of whom would be graduates no longer paying loans).

The introduction of the apprenticeship levy in 2017 possibly offers a model of how larger employers might react to a graduate levy.[19] The apprenticeship levy could equally be regarded as a new 'tax' that was imposed on employers and one might suppose that firms that objected to it might be keen to take the opportunity to claw back as much as possible by maximising their use of the apprenticeship funds. However, by April 2018, just £108 million out of £1.39 billion had been withdrawn.[20] Even allowing for a time lag, this suggests there is considerable elasticity in the attitude of employers to marginal changes that can be shown to support the skills pipeline.

4.2. 'Won't this cost more?'

As explained, the graduate levy does not need to be any different from the current system of student loans in terms of the amounts of money involved. The key difference is where the money comes from. The rubric 'follow the money' may more usually be applied to unearthing political scandals, but it works just as well when trying to design a system that deploys financial incentives to achieve policy goals.

Moreover, because stakeholders' interests are aligned, the graduate levy approach allows changes that would be politically damaging under the current systems to be made painlessly. In particular, under the loans system, the Government could not currently countenance reversing the raising of the repayment threshold to £25,000 (and £25,725 from April 2019) that Theresa May announced at the Conservative Party Conference in October 2017 – an act of largesse that is estimated to have cost over £5.3 billion.[21]

A graduate levy scheme, on the other hand, could be collected on salaries over £21,000 without the recriminations from students or graduates, nor (probably) even from employers for whom it would merely be a reversion to the loan repayment levels of 2017 which they paid indirectly. Together with (removing or lengthening) the time limit, a graduate levy scheme could collect funds more effectively to the tune of billions every year.

4.3. 'Shouldn't students contribute?'

There is an argument that the student's own investment helps them to recognise the value of their higher education. It is sometimes argued that expecting students to invest financially in their education will make them value it more highly, be more committed and engaged, and work harder. The evidence for this position is scant. On the other hand, there is evidence that the financial pressures of this 'investment' can be distracting because students have to spend time doing paid work alongside their studies or because their mental health is affected.[22]

It is also sometimes argued that graduates are economic beneficiaries of their education and so they should contribute to the cost through an affordable means. As the Government's 2011 White Paper put it, 'it is fairer to finance the system by expecting graduates to pay, if and when they are in better paid jobs'.[23] The counter argument is that the income tax system is already suited to exactly this purpose and takes better account of the wider benefit to society of graduates, whether high-earning or not. Furthermore, under a graduate levy, they might in effect 'contribute' by experiencing the downward pressure on gross graduate salaries that employers would be likely to impose to avoid absorbing the full cost of the levy themselves.

Nonetheless, if the government were to conclude that students should invest in their higher education beyond the investment they already make in terms of time, effort and the opportunity to earn money by entering the labour market sooner[24], then the graduate levy would offer a mechanism to achieve this. For a start, the graduate levy is intended to cover tuition costs, but not maintenance.

Under a graduate levy system, for the foreseeable future, the government will have to provide some form of maintenance funding for students. Although this could be repaid through a graduate levy, it makes more sense for it to be borrowed under something like the current system since maintenance costs are mostly not within the control of the higher education provider.

That said, although it goes against my original commitment that the proposals in this paper would be cost-neutral, the reintroduction of a means-tested grant would also end the shameful iniquity of the current system that ensures that the poorest students are those likely to leave university with the highest debts.[25]

Having allowed a hybrid model to pay in one way for maintenance and in another for tuition, it has to be recognised that there is nothing wrong in principle with a hybrid model for tuition, in which tuition fees are not eliminated, but rather significantly lowered (and repaid on the current model) with a graduate levy topping up the rest of the funding.

4.4. When should the graduate levy stop?

Under the current system, student loans are written off thirty years after graduation (or on the graduate's death, whichever is sooner). From a policy perspective, one can imagine that the reasoning behind this is so that prospective students do not feel they are facing lifelong debt. In the process, it provides the Government with a point in the future at which the outstanding debt is recognised as actual cost (an issue to which we shall return later).

There is no need for the graduate levy to be time-limited because neither the threat of lifelong debt nor the need to recognise the loan as a cost applies. The university's investment in their graduate is not time-limited and there is no accounting need to write a 'debt' off since any revenue has no direct link to the cost of provision. In this way, the graduate levy system echoes the US practice of alumni endowments: it is different in that it is non-voluntary and it does not come directly out of the graduate's pocket.

The lack of a cut-off date (or pegging it at retirement age) also means the graduate levy system would generate more funding for higher education in the long run than the current system.

4.5. Protecting the arts and humanities

Given that the graduate levy system delivers funding to universities based on future earnings, some might see this as a threat to subject areas with lower earnings potential – in particular, arts and humanities subjects. There are three reasons why this would not be this case.

i. Although arts and humanities graduates do tend to earn lower average salaries than STEM, law and economics graduates, the per capita cost of running such courses is generally lower. English departments spend just under £5,000 per student, whereas Veterinary Studies departments face three times that cost.[26] Given that split, an English graduate, even with lower earnings, might repay the cost of their degree twice over before a veterinary graduate has repaid theirs even once.

ii. It is no good to a university to uncap the numbers of those of its courses that produce high-earning graduates if it cannot fill the places. Even if the revenue margins might be smaller in arts subjects, it would do better to follow the student demand to some extent, while trying not to flood the market for arts graduates, which would reduce margins still further.

iii. As stated previously, the majority of graduate employers are not enormously concerned about their employees' degree disciplines. They are more interested in their all-round employability.[27] Furthermore, transferable skills, attitudes and behaviours are more resilient to changing labour markets than many technical qualifications[28] and, as the so-called Fourth Industrial Age develops, many predict that social skills and (directed) creativity – which are hard for artificial intelligence to emulate – may become more valuable commodities in the labour market.[29] Many universities might regard arts and humanities courses as a wise investment right now.

The graduate levy approach to funding means that there is no single strategy to the range of courses on offer that will work best for all institutions. Some will adopt a strategy of specialising in high-earning courses. Others will focus on those with a lower margin, but perhaps operating at larger volume. And some will opt to offer a balance in order to spread their risks.

Each university will need to find the niche that works best for itself and they will need to be flexible over time, responding to the best information they can muster about the future labour market. They may well invest heavily in trying to track and predict trends, which would help their planning, but which would also – because all the horses are hitched to the front of the cart – help meet future skills needs and help ensure graduates can gain worthwhile employment.

Rather than a system that expects prospective students to become labour market experts and balance future trends with their own personal ambitions, universities would be incentivised to do so in collaboration with government, the Office for Students and employers – all of whom are far better suited to the role.

Meanwhile, so long as students want to do a subject and employers are willing to employ the graduates, there will be a reason for universities to offer that subject.

To ensure employers are willing to employ them, the graduate levy approach will mean that universities have an incentive to ensure that graduates from these less directly vocational courses acquire the rounded employability described earlier. They will look for opportunities to embed employability development, applied learning and work-related experience into a wider range of courses. That will be good for the universities, good for future employers and good for the students.

4.6. Protecting socially important subjects

The argument about arts and humanities raises other questions. As I have explained, those subjects would largely be protected by lower teaching costs, but there is no intrinsic reason why the cost of courses should correlate with earning potential. Indeed, there are many exceptions to prove it does not. Agricultural workers, for example, are lower paid than other graduates[30] and yet their courses are more expensive to teach than the average.[31] The salaries of graduate skilled agricultural workers do not reflect their importance to the economy (particularly the regional and rural economy), nor would the costs be low enough to persuade universities (from a commercial perspective) to offer these courses.

There are other exceptional situations where the horses might inadvertently pull in different directions: teachers, social workers and nurses are all professions where there is a potential mismatch between the potential income to universities from future earning potential and the need to ensure the country's interests are not damaged by a lack of supply of skilled professionals.[32]

One response might be to say, let the market resolve it. If there's a shortage of teachers, their wages will be likely to rise and that will encourage universities to start training teachers again.

In the long term, this would make sense were it not for three factors. Firstly, teachers, social workers and nurses are, for the most part, in state employment and wages are not as free to float with market pressures as they might be in the private sector. Secondly, it is perhaps no coincidence that in these underpaid professions, women workers outnumber men and the gender pay gaps also serve to confound a free and fair market approach. Thirdly, these are roles where we cannot wait for a long-term market-driven solution. It takes time for market effects to be felt, especially when training alone can take half a decade. While we wait for more nurses or teachers, the sick will go untreated and children will be poorly taught.

The primary responsibility is to resolve the gender pay gap and to pay these roles at a level that better recognises their necessity to society. But even then a market-only response is not enough. Instead, we need to look again to our stakeholder horses in higher education education – students, taxpayers, universities and employers – and ask why one is getting more for less? Which is the main beneficiary? It is the taxpayer who has the greatest incentive to ensure these professions are adequately staffed and so, if the other horses can't pull hard enough, the taxpayer needs to pull harder.

There are various ways of achieving this, but the quickest, simplest and most obvious is that certain degree courses should be subsidised because the country has an interest in ensuring they are taught widely and well. This happens in the current system with additional funding (over and above fee income) for courses with higher course costs (such as Medicine) and for 'strategically important and vulnerable subjects' (mostly STEM).[33]

Under a graduate levy, there is nothing to stop protection of certain subjects through Government subsidy and it is right that this should take place when those subjects serve the public good most directly. What would be different is that the subsidy would be part of the process of balancing benefits between stakeholders rather than an attempt to correct for the fact that the system does not fund some courses adequately (regardless of need for the graduates who study those subjects).

4.7. Higher education in a global marketplace

In an entirely self-contained labour market, graduate levy funding would be a highly efficient way of ensuring the supply of skills matches the demand for them and that students and graduates are fairly treated. However, the global labour marketplace allows graduates to move abroad where their employers would be beyond the reach of a levy. Moreover, employers might seek to avoid a levy by recruiting foreign graduates.

These two problems offer the solution to each other. The same graduate levy would be applied whether the graduate studied in the UK or not. The revenue generated from levies on foreign graduates (which would not be paid to their overseas institutions) could be used to offset the loss of income to institutions whose graduates are removed from the reach of the graduate levy because they have moved abroad.

It is worth pointing out, the current funding system suffers the same problems. Graduates can slip through the repayment net by working outside the UK and employers can, in effect, currently offer higher wages for less to international graduates whose student loans the employer does not have to pay directly. Any safeguards in place now could be applied under a graduate levy as if the individual had been self-employed (see below).

4.8. Self-employed

Under a graduate levy system, the employer rather than the graduate is responsible. There is no need for this to be any different for self-employed workers. The parallel here is again National Insurance Contributions. The self-employed make Class 4 contributions to reflect the fact that they are both employer and employee. These contributions are at a lower rate than the combined employer and employee contributions, which is a pattern that could be repeated for the graduate levy, although I do not see a strong argument for making the exception.[34]

Not only do NICs offer an analogy for the graduate levy, they also offer a ready-made and cost-effective system of collection that works for both the employed and self-employed.

4.9. Institutional collapse

Another objection to the graduate levy might be that universities that fail to establish a long-term income from the employability of their graduates will see their revenue stream dry up. They will either collapse or need to be bailed out.

There is again a hard-line market approach: if they don't serve the purpose, then let them fail. However, that approach is blind to the realities of higher education. What happens to the students when an institution is forced to close? What happens to the regional impact, knowledge exchange, research and staff? These questions may not be solved by the graduate levy, but nor are they created by it. The shift to a model of funding that follows the students (rather than teaching grants) has already conjured the spectral prospect of institutional failure. The Office for Students has been developing strategies to mitigate both the risk and the impact. Not much would change.

That said, the graduate levy offers universities an opportunity for greater autonomy – reliant on their own strategy for their prosperity and freed from the changing winds of government higher education funding policy. It is impossible to eliminate all possibility of institutional failure from any system that does not offer a blank cheque to underwrite all universities, but this approach is intended to create the best conditions to avoid it.

Moreover, if an institution were facing closure, we can always return the first principles: which horses need to pull harder for them all to pull together? If an institution needs to survive, then which stakeholders' stake is large enough to want to save it? It may be, for instance, that local employers and taxpayers would rather come up with a rescue plan than lose so economically important a regional asset as a university, or it may be that central government would recognise the value of stepping in for similar reasons.

5. Transition

How do we get from here to there? The graduate levy system envisages a day when universities bathe in funding from generations of past students, but in the meantime, how do they make ends meet? Similarly, the Government needs an immediate solution to the political problem of tuition fees and student funding.

The solution arises from understanding how student loans are currently recorded in public accounts.[35] There are three important features. Firstly, student loans do not appear as public expenditure in deficit calculations. Secondly, the interest on student loans does appear as revenue to the Treasury, regardless of whether the interest has actually been paid or not (or is ever likely to be). Thirdly, the public subsidy of student loans only appears as a cost in the public accounts when the loss (any loan and interest that has not been repaid) is written off.

This means that the Government can distribute cash to universities and students not only without increasing its budget deficit, but in fact reducing the deficit because of the interest earned. It might be supposed that the chickens will eventually come home to roost on this 'fiscal illusion' (as no less an authority than the Office for Budgetary Responsibility described it recently[36]), but the interest revenue is currently scheduled to outstrip the write-off for at least the next 50 years.[37]

Illusion or not, this financial jiggery-pokery enabled the Coalition Government to effect the transition to the current system of student loans because it *hid* – in political terms, at least – the huge financial outlay needed to lend around £9,000 per year plus maintenance costs to nearly every English student in higher education. This protected higher education funding from the cuts of austerity policies and is often credited with enabling the lifting of the cap on student numbers.

The Office for National Statistics is currently reviewing whether this remains a fair and sustainable way of recording student loans[38], but even if the system of accounting is changed, the way the system works now makes it easier to see the political context in which a transition to a graduate levy is possible.

If we start from the principle that the current system is assumed to be affordable, then it should be equally affordable for the government to continue to foot the bill for English higher education by lending direct to the higher education institutions rather than lending to the students. The higher education institutions would use funds they receive from the graduate levy to repay those loans on the same terms as students repay them now – ie. when graduates earn over the threshold, the higher education institutions pay an equivalent sum to the Treasury.

It would take at least 30 years to ease the Treasury out of the equation, but that is no longer than the terms of loans that have already been extended to students and could be accelerated by introducing the graduate levy at lower than the current repayment threshold (at £21,000, say), but setting higher education institutions' loan repayments at the current £25,000, and using the difference to reduce future loans. Moreover, this gives universities an incentive to ensure graduates are supported into the workplace as soon as possible, which is, after all, the part of a graduate's career where a university's direct support is most likely to be effective.

As generations of graduates start creating income for universities, the Treasury can phase out lending. Some public subsidy would still be necessary but this could and should be directed to support subjects where there is a public interest in maintaining the number of graduates but where either the salaries are low or the course costs are high (such as teaching, social work, medicine and engineering).

Although there are other ways to achieve transition, such as writing off student loans or coercing higher education institutions into buying the student loan book and immediately shifting to supporting them by graduate levies on all existing graduates. However, the transition process proposed above ensures no interruption to higher education revenue, no shock to the public accounts and no additional public expense.

It does leave a question as to whether levies should be imposed on employing existing graduates or only on new ones entering the labour market. There are arguments on both sides. For the sake of simplicity for employers and fairness to different generations of students, it would make sense to transfer all student loans to loans to the HEIs. In effect, the Treasury would gift to each HEI the loan book relating to their graduates in exchange for a guarantee to keep paying what the graduate would have paid. However, there would be technical and legal steps that might make this impractical, not least the fact that parts of the existing student loan book have already been sold.

6. Conclusion

The English system of student loans, particularly since 2011, has been characterised as the marketisation of higher education with different universities competing for students to whom they wish to 'sell' their product. The product in question was the higher education they would receive.

However, the loan system ensured that students do not pay the 'ticket price' and so the market did not work. David Willetts, the then Universities Minister, has acknowledged that he expected higher education institutions to compete more keenly on price and that there were unintended and undesirable consequences, such as the collapse in part-time student numbers.

With the introduction of the Teaching Excellence Framework, Willetts' successor Jo Johnson sought to shift from a market determined by differently priced products to a market led by differences in quality. For prospective students, however, quality is too subjective and multidimensional to be encapsulated in a three-band rating and the reliance on well-informed students making coolly rational choices means the market still isn't working.

The problem is not that the government needs to change the variables of the market, but that it has misunderstood what 'product' is on sale and who are the buyers.

The 'market' in higher education is not built on the student as customer. If we must use the ill-suited language of markets, then students are a precious resource. That resource must partner with universities to create the product, which is their lifelong employability. Between them, they are suppliers of educated graduates to employers and to the nation as a whole that requires a workforce with higher skills. It is they who are the so-called customers.

The need for a graduate levy follows almost self-evidently. Employers and taxpayers hold the purse strings and are in a position to exercise demand in a way that prospective students cannot.

Diverse universities that meet the demand should thrive. That means treating students as precious, educating and nurturing them, which will serve their interests far better than being crowned customer kings and queens.

Whenever we talk of markets, we must remember that higher education is not a playground on which forces of demand and supply can be brutally superimposed by bullyboy economists, wonks and politicians. It is at the core of our culture and prosperity. It is only by realising we share a common goal that we can shape the market to our needs. Market forces will not provide solutions, but if we contrive solutions that suit us all, we can set up the market forces to deliver them.

About this paper

This paper is an expanded version of the Policy Note *Fairer funding: the case for a graduate levy* published by the Higher Education Policy Institute on 29th November 2018 which can be accessed at bit.ly/HEPI-FairerFunding.

Johnny Rich wrote this paper in a personal capacity and its views should not be taken to be the policy or position of any organisation that he may from time to time represent.

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Johnny Rich has a number of roles including Chief Executive of outreach organisation Push, Chief Executive of the Engineering Professors' Council, and a consultant in higher education and employability. His recent clients include the European Commission, HEFCE, CIPA, and a host of recruiters, education bodies and media organisations.

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Endnotes and references

1 The average graduate debt in England is £46,000 according to C. Cullinane, R. Montacute, *Fairer Fees*, London Economics/Sutton Trust (Nov 2017), bit.ly/HEPI-FF-SuttonTrust. According to the Universities Minister Sam Gyimah (*Hansard*, 11th October 2018), the anticipated write-off of unpaid loans (the Resource Accounting and Budgeting charge) is 45 per cent.

2 C. Cullinane, R. Montacute, *Fairer Fees*, London Economics/Sutton Trust (Nov 2017): 'Students from households in the lowest 40 per cent of earners take on average debts of £51,600, compared to £38,400 in the top 20 per cent of households'. Graduate Outcomes (LEO) shows a £3,100 gap in earnings between graduates from the most and least affluent quintiles after one year. The gap widens over time. See Department for Education, *SFR 15/2018* (15th March 2018), bit.ly/HEPI-FF-LEO.

3 Universities UK, *Working in partnership: enabling social mobility in higher education: The final report of the Social Mobility Advisory Group* (October 2016), bit.ly/HEPI-FF-SMAG

4 Universities UK found that that 73 per cent of UK engineering employers reported difficulty in employing graduates with the necessary skills (Solving future skills challenges (August 2018), bit.ly/HEPI-FF-UUK). For example, Engineering UK estimates a shortage of 39,000 engineering graduates per year (The State of UK Engineering 2018 (Jan 2018, bit.ly/HEPI-FF-EngUK, p6).

5 Comparison from HESA: bit.ly/HEPI-FF-HESA and bit.ly/HEPI-FF-HESA16-17

6 This includes the projected write-off of graduate loans. The Institute for Fiscal Studies calculates the up-front cost of higher education (excluding research) as £9.7Bn in 2015/16 (see Chris Belfield et al, *Long-run comparisons of spending per pupil across different stages of education*, IFS (August 2018), bit.ly/HEPI-FF-IFS), however, this includes loans, some of which will be repaid. Based on *Public Expenditure Statistical Analyses*, public spending on all of tertiary education is only £6.31Bn in 2018, but this compares to £3.77Bn in 1993 (bit.ly/HEPI-FF-PESA)

7 See, for example, Hugo Rifkind, 'University tuition fees are a tax. It's time to admit it', *The Spectator* (5/1/2014), bit.ly/HEPI-FF-Spectator

8 Due to the fall in part-time students, overall participation among disadvantaged students has fallen. See Mark Leach, 'Is there really a record number of disadvantaged students in HE?', *Wonkhe* (20/11/2017) bit.ly/HEPI-FF-Wonkhe. Evidence regarding the role of debt aversion may be found in C. Callender and G. Mason, *Research Paper 58: Does student loan debt deter Higher Education participation? New evidence from England*, Centre for Learning and Life Chances in Knowledge Economies and Societies (2017), bit.ly/HEPI-FF-LLAKES

9 This simplified example would entail an almost insignificant reduction in income tax and NI revenue by HMRC, which means the example is not perfectly cost-neutral, but has been simplified for the purpose of illustration.

10 As does, among many others, Universities UK. See its report *Solving future skills challenges* (August 2018), https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/solving-future-skills-challenges.aspx

11 Paul Bolton, Sue Hubble, *Returns to a degree, Briefing Paper number 8389*, House of Commons Library (31st October 2018), bit.ly/HEPI-FF-HoCL

12 Engineering UK, *The State of UK Engineering 2018* (Jan 2018, https://www.engineeringuk.com/umbraco/surface/report/ReturnReport/?file=pdf, p6) suggests an annual shortfall of at least 22,000 engineering graduates and even that assumes that every additional engineering graduate would enter an engineering career. The shortfall may be nearer 39,000 engineering graduates per year. This tallies with Universities UK's finding (see *Solving future skills challenges* (August 2018), https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/solving-future-skills-challenges.aspx) that 73% of UK engineering employers reported difficulty in employing graduates with the necessary skills.

13 See, for example, *BIS Research Paper 231*: *Understanding Employers' Graduate Recruitment and Selection Practices: Main report*, BIS, (November 2015), bit.ly/HEPI-FF-BIS231: '30 per cent of employers look for specific degree subjects when recruiting and this has remained relatively stable over time, thus 70 per cent recruit from any discipline'.

14 Rich, J., *Employability: Degrees of value*, HEPI (2015), bit.ly/HEPI-Employability

15 ibid

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17 This is not a criticism of those efforts, but recognition of the fact that, for many students from non-traditional

backgrounds, the full-time, live-in experience of Oxbridge may not be what they want or need.

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23 Higher education: students at the heart of the system, BIS (June 2011), p17, http://www.educationengland.org.uk/documents/pdfs/2011-white-paper-higher-ed.pdf

24 Or, in the case of mature students, often they have to leave the labour market or accept part-time work in order to make time to study.

25 Means-tested grants were not abolished at the time of the introduction of the current system, but rather in August 2016 as a subsequent cost-saving measure.

26 This is based on HESA calculations from 2015-16 reported in *Times Higher Education*, 'Subject cost data add fuel to England's variable fees debate', 5th October, 2017, https://www.timeshighereducation.com/news/subject-cost-data-add-fuel-englands-variable-fees-debate These are not the costs of running a course, for which accurate data across the HE sector is not available, but department spending per student.

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29 See, for example, *The future of jobs: Employment, workforce and skills strategy for the Fourth Industrial Revolution*, World Economic Forum (Jan 2016), http://www3.weforum.org/docs/WEF_FOJ_Executive_Summary_Jobs.pdf

30 The data is drawn from *Graduate Outcomes (LEO) 2015-2016*, table 10 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/690859/SFR15_2018_Main_text.pdf) and using 'Agriculture and related subjects' as a rough proxy for agricultural workers. Allowing for the limitations of this proxy, this shows consistently lower median earnings compared to all graduates starting at 13% lower one year after graduation and falling to over 20% lower after ten years.

31 According to HEFCE's Financial Sustainability Strategy Group (FSSG), *Study on the sustainability of teaching and learning* (2015), http://www.hefce.ac.uk/funding/finsustain/pubs/Sustainability,of,Learning,and,Teaching,2015/, 'Agriculture and forestry' had about 11% higher costs per student than average fee income (see figure 8).

32 It is a common misconception that nursing is poorly paid compared to other graduate careers. In fact, according to LEO data, in the first five years, nursing graduates earn significantly more than their peers although after 10 years, median nursing salaries start to fall below the average. However, nursing is often more expensive to teach. On the other hand, while education has relatively low costs per student, those who have studied it have median earnings that start lower than average and remain consistently lower. Data drawn from LEO and FSSG as above.

33 Some of these subjects that merited to-up funding used to be call Strategically Important and Vulnerable Subjects (SIVS), a name that reflected the need to protect them.

34 The Treasury would be unlikely to want to extend further benefits to the self-employed. The Chancellor already announced in the Spring Budget of 2017 that Class 4 NICs would be phased out, only to be forced into a U-turn a week later. See 'Hammond scraps National Insurance rise at cost of £500m a year', *Financial Times* (15th March 2017), https://www.ft.com/content/bee1bd84-d485-3af2-822b-090cf7ddb72c

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found on his excellent blog *Critical Education* at https://andrewmcgettigan.org.

36 J. Ebdon & R. Waite, *Working paper No. 12: Student loans and fiscal illusions*, Office for Budgetary Responsibility (July 2018), http://cdn.obr.uk/WorkingPaperNo12.pdf

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